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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,628	11/01/2001	Christopher Richard Doerr	58	3837

7590 06/16/2003

Docket Administrator  
(Room 3J-219)  
Lucent Technologies Inc.  
101 Crawfords Corner Road  
Holmdel, NJ 07733-3030

EXAMINER

KIM, ELLEN E

ART UNIT PAPER NUMBER

2874

DATE MAILED: 06/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

10/035,628

Applicant(s)

DOERR, CHRISTOPHER  
RICHARD

Examiner

Ellen E Kim

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 3, 9-10, and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Mendez et al [USPAT 6,025,944].**

Mendez et al disclose wavelength division multiplexing/code division multiple access hybrid comprising WDM 34 [front drawing], a binary tree including a first stage and a second stage [see fig. 11] of interconnected 1 x 2 switches, and a plurality of multiplexers 234.

In re claims 3 and 14, a planar substrate 238 is shown in fig. 11.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 2, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al.**

Mendez et al disclose the claimed invention except for the relocation of the switches so that the waveguides are crossing each other. It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Mendez et al's device to make the waveguides being cross each other, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

In re claim 11, Mendez et al teach at column 4, lines 27-33 that silica substrate is utilized.

**Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al as applied to claim1 above, and further in view of Okawa et al [USPAT 6,069,990].**

Mendez et al disclose every aspect of claimed invention except for the WGR.

Okawa et al disclose WGR multiplexer and WGR demultiplexer.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to include the WGR demultiplexer and the WGR multiplexer for the purpose of broadening the transmission band and reducing the loss [abstract].

**Claims 5-6, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al as applied to claim 1 above, and further in view of Ueda [USPAT 6,163,633].**

Mendez et al discloses every aspect of claimed invention except for the Mach-Zehnder switch which is activated thermooptically.

Ueda disclose optical waveguide switch comprising a Mach-Zehnder interferometer circuit which is activated thermooptically.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to include the Mach-Zehnder interferometer switch which is activated thermooptically for the purpose of lower power consumption, low extinction ratio, and low crosstalk [abstract].

**Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al.**

Mendez et al discloses every aspect of claimed invention except for the N x N waveguide grating router coupled to the multiplexer.

Official Notice is taken that utilizing N x N waveguide grating router for delaying the transmitted light signal in the optical communication system is old and well known in the art. See In Re Malcolm 1942 C.D. 589:543 O.G. 440 MPEP 706.02 (a).

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify the Mendez et al's device to be coupled to the N x N WGR for the purpose of delaying the signal transmitted.

Art Unit: 2874

**Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al as applied to claim1 above, and further in view of Weaver [USPAT 5,524,155].**

Mendez et al discloses every aspect of claimed invention except for the plurality of shutters.

Weaver discloses a demultiplexer comprising plurality of shutters.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Mendez et al's device to include the plurality of shutters for the purpose of blocking certain signal components as shown in Weaver's reference.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen Kim whose telephone number is (703) 308-4946. The examiner can normally be reached on Monday and Thursday.

Ellen E. Kim  
Primary Examiner



June 12, 2003/EK